

Name _____

Study Guide for Environmental Science Final

Soil

1. Of sand, silt, clay and loam, _____ has the largest particles and therefore the largest spaces between each particle while _____ has the smallest particles. A mixture of sand, silt, and clay is called _____.
2. Soil's ability to support plant growth is known as _____. Loss of water vapor from plants is called _____.
3. The ability for soil to allow the exchange of gases like oxygen and carbon dioxide is called _____. Packing down soil until the air spaces are gone is called _____.
4. The slow, gradual breakdown of rock into smaller particles is called _____. The process where soil particles are picked up and carried away by wind, water, or ice is called _____. Both work together to shape the surface of the Earth.
5. Give 3 examples of physical weathering.
1. _____ 2. _____ 3. _____
6. Erosion can be reduced by planting a cover of _____ and/or trees. Other ways to reduce erosion are through _____, which is the grading of slopes into a series of steps so water does not run down the slope, _____, which involves cultivating alternate strips, leaving grass or hay between, and _____, which is when rows of trees are planted around fields to slow the wind.

Water

7. The upper surface of ground water is called the _____. The chemical added to water for disinfecting is called _____.
8. All of the land area where water from precipitation drains into a certain body of water is known as a/an _____. _____ is a measure of the relative size of streams.
9. Explain 2 ways you can conserve water at home.
1. _____ 2. _____
10. Wetlands formed where rivers meet the seas are called _____. A wetland characterized by sponge peat deposits in standing water is called a/an _____. Flooded forests are also known as _____. The world's most diverse marine ecosystems are _____.
11. Explain 3 reasons wetlands are valuable.
1. _____ 2. _____ 3. _____
12. Circle the correct answer in parentheses:
Soil and water are both (renewable or nonrenewable) resources.

Energy

13. The three fossil fuels are _____, _____, and _____. They are considered nonrenewable. _____ energy which may be fueled by uranium is also nonrenewable.

14. Give 3 examples of renewable energy sources.

- | | | |
|----|----|----|
| 1. | 2. | 3. |
|----|----|----|

15. Explain 2 disadvantages of fossil fuels.

- | | |
|----|----|
| 1. | 2. |
|----|----|

Water Pollution

16. Any material (natural or man-made) that produces undesirable environmental or health effects is considered a/an _____. Disease-causing bacteria, viruses, and other parasitic organisms are called _____.

17. Dead organic matter, such as fallen leaves, twigs, and other plant/animal waste is called _____. Microscopic plants that live suspended in water are called _____.

18. Give 2 examples of point source pollution and 2 examples of nonpoint source pollution.

- | Point | Nonpoint |
|-------|----------|
| 1. | 1. |
| 2. | 2. |

19. Fill in the missing steps in the sequence of eutrophication (which causes harm to an ecosystem).

- | | |
|---|----------------------------|
| 1. _____ are added to the water | 6. _____ builds up |
| 2. _____ | 7. _____ grow |
| 3. Phytoplankton block _____ | 8. _____ gets used up by |
| 4. _____ | bacteria |
| 5. Phytoplankton die due to competition | 9. Animals _____ and _____ |

Air Pollution

20. Pollutants released directly into the atmosphere are called _____ pollutants. Pollutants resulting from reactions of those pollutants in the atmosphere are called _____ pollutants.

21. The brownish haze that typically forms over large cities with lots of automobile traffic is called _____ smog. The grayish mixture of moisture, soot, and sulfurous compounds is called _____ smog. Both affect humans in addition to plants and other animals.

22. A substance with a pH less than 7 is considered a/an _____, but if its pH is higher than 7 it is considered a/an _____. Acid rain has a pH less than _____.

23. A substance that will neutralize the pH of a solution is called a/an _____. A/an _____ reduces the amount of CO and hydrocarbons in a car's exhaust.

24. Which members of a population are most sensitive to air pollution?

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25. Explain why greenhouse gases are important (although we don't want levels to get too high) AND explain why the ozone layer is important (in the stratosphere).

Greenhouse gases

Ozone layer

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Pests and Pest Management

26. Plants that compete with crops, forests, and other important plants for light and nutrients are called _____. Chemicals that kill plants are called _____ and chemicals that kill insects are called _____.

27. Explain 2 reasons introduced species can cause great harm to natural species.

1.

2.

28. Explain 3 disadvantages to chemical pest control.

1.

2.

3.

29. Give 3 examples of cultural pest control.

1.

2.

3.

30. _____ are natural chemical substances that control development and behavior of organisms, and _____ are natural chemical substances produced by certain members of a species that affect the behavior of other members of the same species. They can be used to control pests by disrupting their life cycles without killing other species.